

## Curriculum Vitae

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### **Dr. Zishan Husain Khan**

Professor of Applied Physics  
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**Zishan Husain Khan** is currently **Professor** at the Department of Applied Sciences and Humanities, Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi. He obtained his Ph.D. degree from Jamia Millia Islamia, New Delhi. He has almost 25 years of research experience in semiconductor physics and nanotechnology. He has published more than **150 research papers** in various international reputed journals and guided a number of Ph.D. students. He has presented many research papers in various national and international conferences. He has completed several research projects on various topics in nanotechnology. His research interest includes **3<sup>rd</sup> generation photovoltaic devices, LEDs, OLED, Energy Storage Devices**, and functional materials for the applications in opto-electronic devices. He has worked at several positions in the universities abroad including a **post-doctoral fellowship** at Department of Materials Science & Engineering & Centre of Nanoscience and Nanotechnology **National Tsing Hua University, Hsinchu, Taiwan** during 2001 to 2005. During the post-doctoral research, his work on the fabrication of **FET (field effect transistor) using individual (single) carbon nanotube** was highly appreciated by the scientific community. With this significant experience in nanotechnology, he was **one of the founder members to establish the Centre of Nanotechnology at King Abdul Aziz University, Jeddah, Saudi Arabia during 2007-2012**. During his stay there, he established the world class facilities in nanotechnology with a clean room of level 100 at King Abdul Aziz University, Jeddah, Saudi Arabia. He is also actively involved in designing various courses in nanotechnology and energy sciences for graduate and research students. He is also the regular reviewer for many international journals of high repute. In addition, he has edited several special issues for reputed international journals. Dr. Khan has edited many books for reputed publishers including Springer Nature and published many book chapters with reputed publishers. Prof. Khan has started **M.Tech. (Energy Science and Technology)** program at the Department of Applied Sciences and Humanities and currently managing this program as the **Program Coordinator**. This program has been widely appreciated by the academic community as well as the industry. Prof. Khan has also held several administrative responsibilities in the university. He has been the Director of Centre for Innovation and Entrepreneurship, Deputy Proctor, Honorary Deputy Director in Internal Quality Assurance Cell

(IQAC) and Provost of Dr. Zakir Husain Hall of Boy's Residence in the University. As the **Director, Centre for Innovation and Entrepreneurship**, he successfully led the academic and administrative functioning of the centre. In addition to this, two Govt. of India projects i.e., Livelihood Business Incubator and Design Innovation Centre were also completed under his supervision. In Livelihood Business Incubator project, candidates from the underprivileged sections and school/university dropouts were trained to start their own business. Under his supervision, Livelihood Business Incubator at JMI started producing and selling its products such as Bottled Drinking Water, Cookies and other bakery items, spices and fabrics. The idea of making Livelihood Business Incubator self-sufficient was widely appreciated and featured in different media reports. In the Design Innovation Centre project, design thinking laboratory was established. An innovative academic program i.e., PG diploma in Innovation, Entrepreneurship and Design Thinking was started. This program was widely appreciated and provided 10 start-ups from its first batch. As the **Deputy Proctor, Jamia Millia Islamia, New Delhi**, he worked with the proctorial team of the university under the Chief Proctor. During his tenure as Deputy Proctor, he was involved in maintaining the Law and Order in the university campus. On several occasions, he used conflict resolution strategies to maintain peace at the university campus. As the **Provost, Dr. Zakir Husain Hall of Boy's Residence**, He led a team of wardens and senior wardens for over-all management of the hall of residence consisting ordinarily three Hostels. As the **Honorary Deputy Director, Internal Quality Assurance Cell (IQAC)**, he worked for the various aspects of the quality improvement of the university. During his tenure, university performed well in different national and global university rankings. Prof. Khan has also appeared in various television and radio programs focused on nanotechnology, renewable energy, innovation and start-ups.

### **Education**

<b>Post-Doctoral fellow</b>	<b>2001-2005</b>	National Tsing Hua University, Hsinchu, Taiwan.
<b>Ph.D. (Physics)</b>	<b>1996</b>	Department of Physics, Jamia Millia Islamia, New Delhi, India
<b>M.Sc. (Physics)</b>	<b>1992</b>	Department of Physics, Jamia Millia Islamia, New Delhi, India
<b>B.Sc. (Physics)</b>	<b>1990</b>	Department of Physics, Jamia Millia Islamia, New Delhi, India

### **Academic Experience**

<b>2013 - Present</b>	<b>Professor</b> Department of Applied Sciences & Humanities, Faculty of Engineering and Technology, Jamia Millia Islamia (Central University), New Delhi -110025.
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<b>2006 - 2013</b>	<p><b>Associates Professor</b></p> <p>Department of Applied Sciences &amp; Humanities, Faculty of Engineering and Technology, Jamia Millia Islamia (Central University), New Delhi - 110025.</p>
<b>1996 - 2006</b>	<p><b>Assistant Professor</b></p> <p>Department of Applied Sciences &amp; Humanities, Faculty of Engineering and Technology, Jamia Millia Islamia (Central University), New Delhi -110025.</p>

### **Administrative Experience**

<b>2021-2024</b>	<p><b>Head</b></p> <p>Department of Applied Sciences and Humanities, Jamia Millia Islamia, New Delhi</p> <p><b>Responsibilities</b></p> <p>As the Head, Department of Applied Sciences and Humanities, I am responsible to lead all the administrative matters of the Department. I am the Chairman of the Board of Studies of the Department which is responsible for all the academic matters. I also chair Departmental Research Committee which is responsible for the matters related to Ph. D. scholars.</p>
<b>2017 - 2020</b>	<p><b>Director</b></p> <p>Centre for Innovation and Entrepreneurship, Jamia Millia Islamia, New Delhi</p> <p><b>Responsibilities</b></p> <p>As the Director, Centre for Innovation and Entrepreneurship, I successfully lead the academic and administrative functioning of the centre. In addition to this, two Govt. of India projects i.e., Livelihood Business Incubator and Design Innovation Centre were also completed under my supervision. In Livelihood Business Incubator project, candidates from the underprivileged sections and school/university dropouts were trained to start their own business. Under my supervision, Livelihood Business Incubator at JMI started producing and selling its products such as Bottled Drinking Water, Cookies and other bakery items, spices and fabrics. The idea of making Livelihood Business Incubator self-sufficient was widely appreciated and featured in different media reports. In the Design Innovation Centre project, design thinking laboratory was established. An innovative academic program i.e., PG diploma in Innovation, Entrepreneurship and Design Thinking was started. This program was widely appreciated and provided 09 start-ups from its first batch.</p>
<b>2017 - 2019</b>	<p><b>Deputy Proctor</b></p> <p>Jamia Millia Islamia, New Delhi</p> <p><b>Responsibilities</b></p> <p>As the Deputy Proctor, Jamia Millia Islamia, New Delhi, I worked with the proctorial team of the university under the Chief Proctor. During my tenure as Deputy Proctor, I was involved in maintaining the Law and Order in the university campus. On several occasions, I used conflict resolution strategies to maintain peace at the university campus.</p>

<p><b>2017 - 2018</b></p>	<p><b>Provost</b> Dr. Zakir Husain Hall of Boy's Residence, Jamia Millia Islamia, New Delhi <b>Responsibilities</b> As the Provost, Dr. Zakir Husain Hall of Boy's Residence, I lead a team of wardens and senior wardens for over-all management of the hall of residence consisting ordinarily three Hostels. As provost I sincerely worked for the holistic development of the hostel residents apart from the administrative responsibilities.</p>
<p><b>2016 - 2019</b></p>	<p><b>Honorary Deputy Director</b> Internal Quality Assurance Cell (IQAC), Jamia Millia Islamia, New Delhi <b>Responsibilities</b> As the <b>Honorary Deputy Director</b>, Internal Quality Assurance Cell (IQAC), I worked with the Director, IQAC and other officials of the university for the quality improvement and quality assurance in different aspects of the university. During my tenure, university performed well in different national and global university rankings.</p>
<p><b>2015 - 2017</b></p>	<p><b>Sr. Warden</b> Kellat Hostel, Jamia Millia Islamia, New Delhi <b>Responsibilities</b> As the Sr. warden, I lead a team of wardens and administrative staff for over-all management of Kellat Hostel, JMI.</p>
<p><b>2013 – 2015</b></p>	<p><b>Sr. Warden</b> Sir A. M. Khwaja Hostel, Jamia Millia Islamia, New Delhi <b>Responsibilities</b> As the Sr. warden, I lead a team of wardens and administrative staff for over-all management of Sir A. M. Khwaja Hostel, JMI.</p>
<p><b>2013 – 2014</b></p>	<p><b>Superintendent,</b> B.Tech. Entrance Examination, Jamia Millia Islamia, New Delhi <b>Responsibilities</b> As the Superintendent, I successfully managed the entrance examination of B. Tech., which is one of the prestigious examinations of the university.</p>
<p><b>2006 – 2007</b></p>	<p><b>Asst. Superintendent,</b> B. Tech. &amp; MBA Entrance Examination, Jamia Millia Islamia, New Delhi <b>Responsibilities</b> As the Asstt. Superintendent, I successfully managed the conduction of two prestigious entrance examination of the university i.e. B. Tech. and M.B.A.</p>
<p><b>2005 - 2006</b></p>	<p><b>Asst. Superintendent,</b> B.Tech. Entrance Examinations, Jamia Millia Islamia, New Delhi <b>Responsibilities</b> As the Asstt. Superintendent, I successfully managed the conduction of B. Tech. Entrance Examination.</p>
<p><b>2000 - 2001</b></p>	<p><b>Warden,</b> Pink House Hostel, Jamia Millia Islamia, New Delhi <b>Responsibilities</b> As the warden, I lead a team of administrative staff for over-all management of Sir A. M. Khwaja Hostel, JMI.</p>
<p><b>1997 - 1998</b></p>	<p><b>Warden,</b> Kellat House Hostel, Jamia Millia Islamia, New Delhi <b>Responsibilities</b> As the warden, I lead a team of administrative staff for over-all management of Pink House Hostel, JMI.</p>

## Start-ups Mentoring

Start-up Name	Start-up Objective	Founders Name	Status
Grabit	An Online Learning Platform	Umar Majeed M. Tech.(ES)	Launched
ZA Care	HVAC and Fire-fighting Solutions	Zaid Ahmad PG Diploma in Entrepreneurship, Innovation and Design Thinking (PGD-EID)	Launched
FASTmed	A platform to facilitate the 24*7 online purchase and delivery of medicines and wellness / health related products	Vijay Chauhan, Nabeela, Athar Sidra Ahmad (PGD-EID)	Launched
Nexus Evergreen Energy Pvt. Ltd.	Sustainable energy and environmental	Umar Majeed M. Tech. (ES)	Launched
FINFO	A News aggregator that provides short & bulleted News in text audio	Md. Faizan Ahmad (student of MBA Entrepreneurship)	Launched
Bookworm.com	Purchasing and selling of old/used books through online platform	Mohd. Umar Raza	Prototyping
Armaniya	this start-up wants to train the under privileged women	Gulafshan Salam Khan Student of PGD-EID	Prototyping
Shahnawaz Zari Arts	Anroid App based embroidery and designing platform to connect the vendors and costumers	Shawaz Saifi Student of PGD-EID	Prototyping
Metro Footwear	A new concept “Shoe it up” has been recently introduced for customization	Khizr Saleem Student of PGD-EID	Launched
Niravana Technologies	A unique concept, wellness with music, It is an android application which recommend the music as per the symptoms	Pritibha Pansari Student of PGD-EID	Research level

## Foreign Assignments

<b>2007-2012</b>	<b>Associate Professor</b> King Abdul Aziz University, Jeddah, Saudi Arabia
<b>2001-2005</b>	<b>Post-Doctoral Fellow</b> National Tsing Hua University, Hsinchu, Taiwan.

## Fellowships

- **Post-Doctoral Fellowship**, National Tsing Hua University, Hsinchu, Taiwan. (2001-2005)

## Research Interests

<b>3<sup>rd</sup> Generation Photovoltaic Devices</b>	Perovskite based solar cells (Lead-Halide Perovskite based Solar Cells, Lead-free Halide double Perovskite based Solar Cells) Dye Sensitized Solar Cells
<b>LEDs and OLEDs</b>	Perovskite Nanocrystals for LEDs, Organic Luminescent Materials for OLEDs
<b>Energy Storage Devices</b>	2-D Transition Metal Chalcogenides for Energy Storage Devices

### Academic Achievements

- Over 25 years of research and teaching experience.
- Developed high performance new generation solar cells based on Perovskite materials.
- Developed Carbon nanotube (CNT) based gas sensors.
- Developed individual Carbon nanotube (CNT) based Field Effect Transistor (FET).
- Developed high performance Organic Materials for Organic Light Emitting Diode (OLEDs).
- Developed nano-biosensor for detection of biohazards.
- Developed 2D- chalcogenides materials for sustainable energy applications.
- Published more than 150 peer-reviewed research articles, 05 books published with Springer nature, 17 book chapters published with Springer nature and technical reports.
- Invited talks/presentations in the conferences/seminars/workshops.
- Reviewer for many reputed science indexed International journals.
- Secured research funding from different National and International funding bodies.
- Leadership skills in education, research & development. Mentored and trained undergraduate, graduate and doctorate students.
- Served on various administrative positions and committees to enhance the institutions plans and vision.

### Outstanding Achievements

- **Established** Center of Nanotechnology, King Abdul-Aziz University, Jeddah, Saudi Arabia.
- Worked as post-doctoral researcher, National Tsing Hua University, Hsinchu, Taiwan.
- Papers published with Royal Society of Chemistry, Elsevier, Wiley & Sons, Springer, Taylor & Francis, etc. publishers.
- International research collaborations with leading research groups.
- Mentored more than 10 start-ups.

### Academic programs developed

<b>2018 - Present</b>	<b>M.Tech. (Energy Science and Technology), Course Co-Ordinator</b> Department of Applied sciences and Humanities, Jamia Millia Islamia, New Delhi
<b>2018 – 2020</b>	<b>P.G. Diploma in Entrepreneurship Innovation &amp; Design Thinking Course Co-Ordinator</b> Centre for Innovation and Entrepreneurship, Jamia Millia Islamia, New Delhi.
<b>2018 - 2020</b>	<b>Entrepreneurship Development Programme (EDPs) (For underprivilege of the society)</b>

	<p><b>Course Co-Ordinator</b> Centre for Innovation and Entrepreneurship, Jamia Millia Islamia, New Delhi.</p>
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### **Academic Curriculum Developed**

<b>Curriculum Name</b>	<b>Course Name</b>	<b>Department</b>
Fundamentals of Energy Sciences	M.Tech. (Energy Science and Technology)	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Physics and Chemistry of Energy Materials	M.Tech. (Energy Science and Technology),	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Energy Resources: Concepts and Technologies	M.Tech. (Energy Science and Technology)	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Energy from Waste	M.Tech. (Energy Science and Technology),	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Introduction to Nanotechnology	M.Tech. (Energy Science and Technology),	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Nanoelectronics	M.Tech. (Energy Science and Technology),	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Energy Science & Technology Lab-I	M.Tech. (Energy Science and Technology),	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Advanced Energy Materials	M.Tech. (Energy Science and Technology),	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Energy Economics and Energy Policy	M.Tech. (Energy Science and Technology),	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Energy Audit	M.Tech. (Energy Science and Technology),	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Energy Management Systems	M.Tech. (Energy Science and Technology),	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Embedded Control Systems	M.Tech. (Energy Science and Technology),	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Power Electronics	M.Tech. (Energy Science and Technology),	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Energy Science & Technology Lab-II	M.Tech. (Energy Science and Technology),	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Energy Efficient Lighting and displays	M.Tech. (Energy Science and Technology),	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Energy Storage Systems	M.Tech. (Energy Science and Technology),	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Wind Energy: Resource, Engineering & Projects	M.Tech. (Energy Science and Technology),	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Solar Photovoltaic Technology	M.Tech. (Energy Science and Technology),	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Innovative Science and Technology (IST)	B.Tech.	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi

Introduction of Nanoscience and Nanotechnology	M.Sc. (Electronics)	Department of Applied Science and Humanities Jamia Millia Islamia, New Delhi
Nanomaterials: Synthesis and Applications	M.Sc. (Electronics)	Department of Applied Science and Humanities, Jamia Millia Islamia New Delhi
Green (Organic) Electronics	M.Sc. (Electronics)	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi

### Teaching Assignments

Course Name	Level	Department/Centre
Introduction to Nanotechnology	M.Tech. (Energy Sciences)	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Energy Storage Systems	M.Tech (Energy Sciences)	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Innovative Science and Technology (IST)	B.Tech.	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Introduction of Nanoscience and Nanotechnology	M.Sc. (Electronics)	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Nanomaterials: Synthesis and Applications	M.Sc. (Electronics)	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Green (Organic) Electronics	M.Sc. (Electronics)	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Engineering Physics-I	B.Tech.	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Engineering Physics-II	B.Tech.	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,
Electromagnetic Magnetic Field Theory	B.E. (Electrical Engineering)	Department of Applied Science and Humanities, Jamia Millia Islamia, New Delhi,

### Major Research Project Grants

Title of Project	Funding Agency	Sanctioned Grant	Duration		Status
			From	To	
Biomass nanocomposites with low volatile matter as a replacement for conventional coal for co-firing operation in thermal power plants	Department of Science and Technology, Govt. of India	INR 2,28,94,960/-	March 2023	Feb. 2026	Ongoing
Upgradation of M.Tech. (Energy Sc. & Technology)	Ministry of New and Renewable Energy, Govt. of India	INR 47,25,000/-	March 2023	Feb. 2025	Ongoing
Bulk heterojunction hybrid solar cells based on Perovskite photo-active layers	Department of Science and Technology, Govt. of India	INR 52,77,892/-	July 2017	Feb, 2021	Completed
Enhanced and tuneable photoluminescence from	University Grant Commission (UGC),	INR 14,29,000/-	April, 2013	March 2017	Completed



metal doped tris (8-hydroxyquiniline) aluminium (Alq3) nanowires for opto-electronic devices	India				
Development of carbon nanotubes-based Nano sensors for monitoring the ultra-trace concentration of carbon mono-oxide in air	Center of Excellence in Environmental Sciences, King Abdul Aziz University Jeddah, Saudi Arabia	SR 4,57,000/-	2010	2012	Completed
Crystallization Kinetics in a-Ga <sub>x</sub> Se <sub>70-x</sub> Pb <sub>x</sub> Chalcogenide Glasses	Deanship of Scientific Research, King Abdul Aziz University Jeddah, Saudi Arabia	SR 70,600/-	2010	2012	Completed
Synthesis of amorphous semiconducting nanostructures (nanoparticles, nanorods and nanowires) for data storage devices	King Abdul Aziz City of Science and Technology, Riyadh, Saudi Arabia	SR 65,800/-	2007	2008	Completed
Optical Properties of Amorphous Semiconductors	Jamia Millia Islamia, New Delhi, India	INR 50,000/-	2000	2002	Completed

### **Conference/ workshop Organized**

<b>Title of Conference/workshop</b>	<b>Date (s)</b>	<b>Role</b>	<b>Venue/Organizer</b>
International Conference on Renewable Energy & Sustainable Technologies (ICREST-2024)	04-06 July 2024	Organizing Chair	Department of Applied Sciences & Humanities, Jamia Millia Islamia, New Delhi, India
Brainstorming workshop on the innovative solar PV technologies and possibilities of their commercialization for large area PV modules in collaboration with industries	21, December, 2022	Co-ordinator	Jointly organized by Department of Applied Sciences & Humanities, Jamia Millia Islamia, New Delhi, India and Department of Science and Technology (DST)Ministry of Science and Technology, Government of India
International Conference on Nanotechnology: Opportunities & Challenges (ICNOC-2022)	28-30, November, 2022	Organizing Chair	Department of Applied Sciences & Humanities, Jamia Millia Islamia, New Delhi, India
Organic Light Emitting Diodes (OLEDs) for Future Lighting and Displays. Global Initiative and Academic Networks (GIAN)	26-30 December, 2017	GIAN, Course Co-Ordinator	Organic Electronics & Nanotechnology Research Laboratory, Department of Applied Sciences & Humanities, Jamia Millia Islamia, New Delhi,

			India
National Conference on Nanotechnology and Renewable Energy (NCNRE-14)	28-29 April, 2014	Convener	Department of Applied Sciences & Humanities, Jamia Millia Islamia, New Delhi, India
International Conference on Nanotechnology organized	17-19 June, 2008	Member of scientific committee	Center of Nanotechnology, King Abdul Aziz University, Jeddah, Saudi Arabia
Workshop on Nanotechnology; Opportunities and Challenges	14-16 June, 2008	Member of organizing committee	Center of Nanotechnology, King Abdul Aziz University, Jeddah, Saudi Arabia

### **Ph.D. Students Guided**

<b>Name of the PhD Scholar</b>	<b>Title of PhD Thesis</b>	<b>Role</b>	<b>Year of Award</b>
Nafees Ahmad	Effect of Semiconducting Nanomaterials on the surface of poly-methyl methacrylate (PMMA) dentures.	Supervisor	2024
Harshvardhan Singh	Development of doped nanoparticles for the conversion of plants-based biomass to biodiesel	Supervisor	2023
Romana Naaz	Development of Sustainable Nanomaterials; Their effects on Polythene Degradation and Microbial Activity	Supervisor	2023
Sultan Ahmad	Studies on Inorganic and Organic Semiconducting Nanostructures	Supervisor	2023
Hasan Abbas	Study of perovskite-based materials	Supervisor	2023
Azra Parveen	An Investigation into Digital Image Forgery Detection Techniques.	Supervisor	2022
Mohammad Bilal Khan	Synthesis and characterization of Organic Semiconducting Nanostructures for opto-electronic Devices	Supervisor	2021
Mohd. Ehteshamuddin	Design and Simulation of High Performance Emerging Nanoelectronics Devices	Supervisor	2021
Mohammad Parvaz	Synthesis and Characterization of semiconducting nanostructures	Supervisor	2020
Pramod Kumar Gupta	Studies on Nano-biosensors	Supervisor	2019
Rahul	Studies on Organic Solar Cells	Supervisor	2018
Tanweer Ashraf	Studies on Nano chalcogenides	Supervisor	2017
Ravi Keshwar	Electrical and Optical properties of	Co- Supervisor	2014

Kumar	semiconducting nanostructures”		
Islamuddin	Electrical and Optical properties of ZnO nanostructures	Supervisor	2009
Karunapati Tripathi	Synthesis and characterization of Nano-structures”	Co- Supervisor	2008
Monika Aggarwal	Growth and characterization of Carbon Nanotubes grown on Fe and Fe-Pd films”	Co- Supervisor	2008

### **Ph.D. Students working**

<b>Name of the PhD Scholar</b>	<b>Title of PhD Thesis</b>	<b>Role</b>
Mohammad Salman Khan	Studies on Organic-Inorganic Perovskite Materials for Photo-voltaic Applications	Supervisor
Asim Khan	Synthesis and Characterization of 2D layered Chalcogenides	Supervisor
Ankur Mishra	Studies on perovskite nanocrystals for photovoltaic applications	Supervisor
Reeba Mary Thomas	Synthesis and Characterization of Organic inorganic/ all Inorganic Perovskite materials	Supervisor
Ahkam Ali	Investigating the influence of surface engineering on gas sensing properties of two dimensional heterostructures	Supervisor
Sanam Husain	Effect of metal doping on all inorganic perovskite nanocrystals	Supervisor
Shahana Shahin	The role of nanomaterials in enhancing the performance of Perovskite Solar Cells	Supervisor

### **Invited talks and session chaired**

<b>Topic</b>	<b>Level of Activity</b>	<b>Date</b>	<b>Inviting Organization</b>
B-site doping in Perovskite Nanocrystals	Invited Speaker	22 - 23 Oct., 2024	Doon University, Dehradun
Perovskite Nanocrystals for Efficient and Stable Optoelectronic Devices	Invited Speaker	18– 20, Sept., 2024	Amity University, Noida
International Conference on Renewable Energy & Sustainable Technologies (ICREST-2024)	Session Chair	04-06July, 2024	Jamia Millia Islamia, New Delhi
Metal Halide Perovskite Nanocrystals as Building Blocks for Efficient and Stable Optoelectronic Devices	Invited Speaker	22-24 November, 2023	University of Allahabad, Prayagraj, Uttar Pradesh, India
International conference on Futuristic materials (ICFM-2022)	Plenary Speaker	8-9 December 2022	Manav Rachna University, Faridabad, Haryana, India
International Conference on Nanotechnology: Opportunities & Challenges (ICNOC-2022)	Session Chair	28-30, November, 2022	Department of Applied Sciences & Humanities, Jamia Millia Islamia, New Delhi, India
International Online Conference	Invited	12-14	Mahatma Gandhi University,

on Nano Materials (ICN 2022)	Speaker	August 2022	Kottayam, Kerala, India
“Studies on perovskite solar cells” International Online Conference on Nano Materials (ICN 2021)	Invited Speaker	9-11 April 2021	Mahatma Gandhi University, Kottayam, Kerala, India
Recent development in Materials Sciences	Invited Speaker	2-3 June, 2020	Department of Physics, St. Andrew's P.G. College Gorakhpur 273001, U. P., India
International Conference on Advanced Materials (ICAM)	Chaired One Sessions	March 6-7, 2019	Jamia Millia Islamia, New Delhi, India.
International Conference on Advances in Nanomaterials and Nanotechnology	Chaired two Sessions	Nov 4-5, 2016	Jamia Millia Islamia, New Delhi, India.
National Conference on Emerging Trends in Electrical & Electronics Engineering (ETEEE-2015)	Chaired One Sessions	2015	Department of Electrical Engineering, Jamia Millia Islamia, New Delhi, India.
12 <sup>th</sup> IEEE Indicon 2015	Chaired One Sessions	Dec 17-20, 2015	Department of Electrical Engineering, Jamia Millia Islamia, New Delhi, India.
Nanotechnology for Mechanical Engineers	Invited Speaker	Feb 27 – March 12, 2015	Department of Mechanical Engg., Jamia Millia Islamia, New Delhi
Nanotechnology; Introduction and Applications	Invited Speaker	May 12 - June 02, 2014	UGC Academic Staff College, Jamia Millia Islamia, New Delhi,
National conference on Advanced Trends in Nanoscience and Nanotechnology (ATTNN-2013)	Chaired One Sessions	2013	Department of Applied Sciences and Humanities, Jamia Millia Islamia, New Delhi, India.
Nano chalcogenides; Synthesis and Characterization National Conference on Nanoscience and Nanotechnology ALIGARH NANO-III	Invited Speaker	March 15-16, 2013	Aligarh Muslim University, Aligarh, India.
Effect of CO gas on the electrical properties of Carbon Nanotubes 17th National Seminar on Physics and Technology of Sensors	Invited Speaker	March 11-13, 2013	Jamia Millia Islamia, New Delhi, India.
Electrical and gas sensing properties of multi-walled carbon nanotubes films. National Conference on Nanoscience and Nanotechnology ALIGARH NANO-II	Invited Speaker	March 10-12, 2012	Aligarh Muslim University, Aligarh, India.
Electrical Transport in Nicatalyzed multi-wall carbon nanotubes. International Conference of Nanotechnology (ICON008)	Invited Speaker	June 17 -19, 2008	Center of Nanotechnology, King Abdul Aziz University, Jeddah, Saudi Arabia.

## **Publications**

### **(A) Patents**

<b>Name of the Inventor(s)</b>	<b>Title</b>	<b>Patent / Application No.</b>	<b>Status</b>	<b>Year of filing</b>
Numan Abdullah Salah, Adnan Memic, Attieh A.AL-Ghamdi, Sabah Eid Algarni, <b>Zishan H. Khan</b>	Methods of Making Doped Alq3 Nanostructure with Enhanced Photoluminescence	US 2016/0369165 A1	Granted (2018)	Dec. 22, 2016
Numan Salah, Sami S. Habib, <b>Zishan H. Khan,</b> Mahmoud N. Nahas	Methods of making epoxy composites based on fly ash carbon nanotubes	US14843690	Granted	March 2, 2017

### **(B) Books**

<b>Author(s)</b>	<b>Title of Book</b>	<b>Year of Publication</b>	<b>Name of Publishers</b>	<b>ISBN Number</b>
Zishan HusainKhan, Mark Jackson, Numan A. Salah (Editors)	Recent Advances in Nanotechnology: Select Proceedings of ICNOC 2022	2023	Springer	978-981-99-4685-3
Zishan HusainKhan, Mark Jackson, Numan A. Salah (Editors)	Recent Advances in Nanomaterials: Select Proceedings of ICNOC 2022	2023	Springer	978-981-99-4878-9
Zishan H. Khan	Nanomaterials for Innovative Energy Systems and Devices	2022	Springer	978-981-19-0553-7
Zishan H. Khan	Emerging Trends in Nanotechnology	2021	Springer	978-981-15-9904-0
Zishan H. Khan	Nanomaterials and Their Applications	2017	Springer	978-981-10-6214-8
Zishan H. Khan	Recent Trends in Nanomaterials	2017	Springer	978-981-10-3842-6
Zishan H. Khan, M. Husain (Ed.)	Advances in Nanomaterials	2016	Springer	978-81-322-2666-6, 978-81-322-2668-0
Zishan Husain Khan, Mushahid Husain, Weqar Ahmad Siddiqui, Masood Alam (Editors)	Advances in Nanotechnology and Renewable energy: Conference Proceedings (NCNRE-14)	2014	Bharti Publications	978-93-81212-65-3

**(C) Book Chapters**

<b>Author(s)</b>	<b>Title of Book/Chapter</b>	<b>Year</b>	<b>Name of Publishers</b>	<b>ISSN/ISBN Number</b>
Rahul Johari, Pawan Kumar, Urmila Samariya, Narender Budhiraja, Siddhartha, Kaushlendra Agrahari, Chandra Shakher Pathak, Prmod K Singh, <b>Zishan H Khan</b> , Mamta Bhatia, Shailesh D Kamble, Subhash Singh	Optical Sensors Based on Metal– Organic Frameworks <i>Advanced Functional Materials for Optical and Hazardous Sensing: Synthesis and Applications</i>	2023	Springer	978-981-99- 6014-9
Mohammad Salman Khan, Mohd Bilal Khan, Sultan Ahmad, Hasan Abbas, Asim Khan, Ankur Mishra, Reeba Mary Thomas, <b>Zishan Husain Khan</b>	Facile Synthesis of Lead-Free Mixed Halide Double Perovskite Cs <sub>2</sub> AgBiX <sub>6</sub> (X = Br, I) Nanocrystals (NCs) for Photovoltaics Applications <i>Recent Advances in Nanomaterials: Select Proceedings of ICNOC 2022</i>	2023	Springer	978-981-99- 4685-3
Sultan Ahmad, Mohd Bilal Khan, Mohammad Salman Khan, Hasan Abbas, Ankur Mishra, Reeba Mary Thomas, Asim Khan, <b>Zishan Husain Khan</b>	Synthesis and Characterization of Highly Luminescent and Stable Cesium Lead Halide Perovskite Nanocrystals for Optoelectronic Applications <i>Recent Advances in Nanomaterials: Select Proceedings of ICNOC 2022</i>	2023	Springer	978-981-99- 4685-3
Aditya Srivastava, Zubair MSH Khan, <b>Zishan H Khan</b> , Shamshad A Khan	Studies of Se <sub>85</sub> Te <sub>12</sub> Bi <sub>3</sub> and Se <sub>85</sub> Te <sub>9</sub> Bi <sub>6</sub> Nanochalcogenide Thin Films at Different Working Pressures <i>Recent Advances in Nanomaterials: Select Proceedings of ICNOC 2022</i>	2023	Springer	978-981-99- 4685-3

Asim Khan, Waseem Ashraf, Manika Khanuja, <b>Zishan Husain Khan</b>	Enhanced Performance of Nanostructured WSe <sub>2</sub> as an Electrode Material for Supercapacitor <i>Recent Advances in Nanomaterials: Select Proceedings of ICNOC 2022</i>	2023	Springer	978-981-99-4685-3
Archana Srivastava, <b>Zishan H Khan</b> , Shamshad A Khan	Influence of Gamma Irradiation on Structural and Optical Parameters of Se <sub>85</sub> Te <sub>9</sub> Ag <sub>6</sub> Nano chalcogenide Thin Films <i>Recent Advances in Nanomaterials: Select Proceedings of ICNOC 2022</i>	2023	Springer	978-981-99-4685-3
Syed Mehfooz Ali, Nadeem Ahmad Arif, Mohammad Mudassir Hashmi, Mohd Bilal Khan, <b>Zishan H Khan</b>	Recent Developments in Electrolyte Materials for Rechargeable Batteries <i>Nanomaterials for Innovative Energy Systems and Devices</i>	2022	Springer	978-981-19-0553-7
Mohammad Mudassir Hashmi, Nadeem Ahmad Arif, Syed Mehfooz Ali, Mohd Bilal Khan, Mukesh P Singh, <b>Zishan H Khan</b>	Recent Progress in Separators for Rechargeable Batteries <i>Nanomaterials for Innovative Energy Systems and Devices</i>	2022	Springer	978-981-19-0553-7
Nadeem Ahmad Arif, Mohammad Mudassir Hashmi, Syed Mehfooz Ali, Mohd Bilal Khan, <b>Zishan H Khan</b>	Advances in Electrode Materials for Rechargeable Batteries <i>Nanomaterials for Innovative Energy Systems and Devices</i>	2022	Springer	978-981-19-0553-7
Rasha Sultan, Hasan Abbas, Mohd Khan, <b>Zishan H Khan</b>	Nanomaterials for Perovskite Solar Cells <i>Nanomaterials for Innovative Energy Systems and Devices</i>	2022	Springer	978-981-19-0553-7
Fareed Ahmad, <b>Zishan H Khan</b> , Sundar Singh	Graphitic Carbon Nitrides: Synthesis, Properties, and Applications in Perovskite Solar Cells <i>Nanomaterials for Innovative Energy Systems and Devices</i>	2022	Springer	978-981-19-0553-7
Rahul Johari, Utkarsh Kumar, Rakesh K Sonker, Pawan Kumar,	Perovskite-Based Gas Sensors <i>Smart Nanostructure Materials and Sensor Technology</i>	2022	Springer	978-981-19-2685-3

Renu Singh, Devesh Garg, Okai Victor, Pramod K Singh, <b>Zishan H Khan</b> , Kaushlendra Agrahari				
Azra Parveen, <b>Zishan Husain Khan</b> , Syed Naseem Ahmad	A Fuzzy-Based Multi-Criteria Decision-Making Approach for the Selection of Digital Image Forensic Tools <i>Multiple Criteria Decision Making</i>	2022	Springer	978-981-16- 7414-3
Rahul, Rakesh K. Sonker, P. K. Shukla, Pramod K. Singh, <b>Zishan H. Khan</b>	Experimental and Characterization Techniques <i>In Composite Materials</i>	2021	CRC Press	9781003080633
Rahul, Sultan Ahmad, Pramod K. Singh, <b>Zishan H. Khan</b>	<i>Studies on Dye-Sensitized Solar Cells Incorporated with Perovskite as Sensitizer Dye</i> <i>In Emerging Trends in Nanotechnology</i>	2021	Springer Singapore	978-981-15- 9904-0
Mohd Parvaz, Hasan Abbas, <b>Zishan H Khan</b>	<i>Synthesis and Photocatalytic Properties of 2D Transition Metal Dichalcogenides</i> <i>In Emerging Trends in Nanotechnology</i>	2021	Springer Singapore	978-981-15- 9904-0
Nafis Ahmad, Zeba Jafri, Asim Khan, <b>Zishan H Khan</b>	<i>Nanomaterials: A Windfall to Dentistry</i> <i>In Emerging Trends in Nanotechnology</i>	2021	Springer Singapore	978-981-15- 9904-0
Mohd. Bilal Khan, <b>Zishan H. Khan</b>	<i>Nanodiamond: Synthesis and Applications</i> <i>In Nanomaterials and Their Applications</i>	2018	Springer Nature Singapore Pte Ltd.	978-981-10- 6214-8
Pramod K. Gupta, <b>Zishan Husain Khan</b> , Pratima R. Solanki	<i>Prospects of Nanostructured ZrO<sub>2</sub> as a Point-of-Care Diagnostics</i> <i>In Recent Trends in Nanomaterials</i>	2017	Springer Nature Singapore Pte Ltd.	978-81-322- 2668-0
Mohd. Bilal Khan, M. Parvaz & <b>Zishan H. Khan</b>	<i>Graphene Oxide: Synthesis and Characterization</i> <i>In Recent Trends in Nanomaterials</i>	2017	Springer Nature Singapore Pte Ltd.	978-81-322- 2668-0
<b>Zishan H. Khan</b> , Shamshad A. Khan, Faisal A. Agel, Numan A. Salah & M. Husain	<i>Chalcogenides to Nanochalcogenides; Exploring possibilities for future R&amp;D</i> <i>In Advances in Nanomaterials</i>	2016	Springer (India) Pvt. Ltd.)	978-81-322- 2666-6, 978-81-322- 2668-0
<b>Zishan H. Khan</b>	<i>Introduction to Nanomaterials</i>	2016	Springer	978-81-322-



	<b>In Advances in nanomaterials</b>		(India) Pvt. Ltd.)	2666-6, 978-81-322-2668-0
<b>Zishan H. Khan,</b> M. Husain	<i>Nanotechnology for Biological Sciences</i> <b>In Modern Biotechniques and Biotechnology</b>	2015	Discovery Group	978-08-660-5134-7

#### (D) Research Articles

S. No.	Author (s)	Title of Paper	Name of Journal	Volume, Page No., Year	Name of the Publisher
154.	Mohammad Slaman Khan, Zishan Husain Khan	Facile synthesis of Lead Free Halide Double Perovskite (Cs <sub>2</sub> AgBiBr <sub>6</sub> ) nanocrystal for the Photovoltaics and Visible Light Photocatalytic Application	Journal of Nanoelectronics and Optoelectronics (JNO)	(Accepted) (2025)	American Scientific Publishers
153.	Nafis Ahmad, Zeba Jafri, Mohd Shoeb Khan, S. Ishraque Ahmad, Saiema Ahmedic, Nikhat Manzoor, <b>Zishan Hussain Khan</b>	Effect of amorphous & crystalline zirconia on structural, optical, antifungal and thermal behavior of PMMA/ZrO <sub>2</sub> nanocomposites in complete denture prosthesis.	Iranian Polymer Journal	(Accepted) (2025)	Springer Nature
152.	Zoheb Karim, Mohd Jahir Khan, Afzal Hussain, Faheem Ahmed, <b>Zishan Husain Khan</b>	Multilayer patch functionalized microfibrillated cellulosic paper sensor for sweat glucose monitoring	Scientific Reports	14 23434 (2024)	Nature Publishing Group
151.	Mohd Bilal Khan, Sultan Ahmad, Hasan Abbas, Asim Khan, <b>Zishan H Khan</b>	Alq <sub>3</sub> : Pt nanowires for cathode interfacial layers (CILs) in perovskite photovoltaics	MRS Energy & Sustainability	11 669-678 (2024)	Springer Nature
150.	Zoheb Karim, Mohd Jahir Khan, Afzal Hussain, Faheem Ahmed, <b>Zishan Husain Khan</b>	Impact of functionalized and structurally tuned cellulosic composite membranes on removal of metal ions, dye, drug, and proteins	Colloids and Surfaces A: Physicochemical and Engineering Aspects	692 134031 (2024)	Elsevier

149.	Murugan Velmurugan, Thangavelu Sakthi Priya, Tse-Wei Chen, Shen-Ming Chen, Thangavelu Kokulnathan, Hsin-Yu Chuang, Faheem Ahmed, Afzal Hussain, <b>Zishan Husain Khan</b>	Sustainable synthesis of praseodymium tungstate: An electrochemical probe for detection of Ronidazole	Microchemical Journal	201 110657 (2024)	Elsevier
148.	Sultan Ahmad, Mohd Bilal Khan, Mohammad Salman Khan, Ankur Mishra, Saif MH Qaid, Yedluri Anil Kumar, <b>Zishan H Khan</b>	Enhanced photoluminescence characteristics in Mg doped Alq3: An insight into doping mechanism	Optical Materials	153115558 (2024)	Elsevier
147.	Zoheb Karim, Mohd Jahir Khan, Afzal Hussain, Faheem Ahmed, <b>Zishan Husain Khan</b>	Impact of functionalized and structurally tuned cellulosic composite membranes on removal of metal ions, dye, drug, and proteins	Colloids and Surfaces A: Physicochemical and Engineering Aspects	692, 134031 (2024)	Elsevier
146.	Santosh Kumar, Aasim Hussain, Azher Majid Siddiqui, <b>Zishan H Khan</b> , Mohammad Margub Abdullah, Md Tanweer Ashraf	Synthesis and study of the impact of calcination duration on the properties of Al4 (ZnO) 96 nanoparticles	Nano-Structures & Nano-Objects	39, 101250 (2024)	Elsevier
145.	Sultan Ahmad, Mohd Bilal Khan, Poonam Yadav, Bandar Ali Al-Asbahi, Kulurumotlakatla Dasha Kumar, <b>Zishan H Khan</b>	Rapid PL enhancement in Cd doped Alq3 nanowires	Physica B: Condensed Matter	676, 415675 (2024)	Elsevier
144.	C Vignesh, K Vinoth, J Emima Jeronsia, L Chinnappa, Faheem Ahmed, <b>Zishan Husain Khan</b> , Nasser M Abd El-Salam, Hassan Fouad	Enhancement of Thermoelectric Properties in Nanocomposites Through the Synergistic Integration of Zinc and Iron Oxides with Polyaniline	Science of Advanced Materials	16 (2), 167-176 (2024)	American Scientific Publishers

143.	Aditya Srivastava, <b>Zishan H Khan</b> , Shamshad A Khan	Effect of ambient argon pressure on the structural, optical and electrical properties of non-crystalline Se <sub>85</sub> Te <sub>3</sub> Bi <sub>12</sub> nano-thin films	Journal of Physics D: Applied Physics	57 (9), 095303 (2023)	IOP Publishing
142.	Nafis Ahmad, Syed Ishraque Ahmad, Saiema Ahmed, Poonam Yadav, Nikhat Manzoor, Mohd Parwaz, <b>Zishan Husain Khan</b>	Structural, optical and antifungal properties of the PMMA-ZnO nanocomposites: Potential applications in odontology	Materials Chemistry and Physics	309, 128382 (2023)	Elsevier
141.	I Uddin, M Sarvar, F Khan, H Howari, <b>ZH Khan</b> , J Ali	The effect of CuO concentration on the dc conductivity of ternary metal oxide nanocomposite	Indian Journal of Physics	97 (14), 4225-4231 (2023)	Springer Nature
140.	Rahul Johari, Rakesh K Sonker, Okai Victor, <b>Zishan H Khan</b> , Daksh Aggarwal, Sandhya Gupta, Sushant Kumar	Optoelectronic Study of Polymer Electrolyte Incorporated Perovskite Sensitized Solar Cell	Macromolecular Symposia	407 (1), 2200126 (2023)	
139.	Sundar Singh, Veerendra Kumar, Sanjeev Tyagi, Nupur Saxena, <b>Zishan H Khan</b> , Pragati Kumar	Room temperature ferromagnetism in metal oxides for spintronics: A comprehensive review	Optical and Quantum Electronics	55 (2), 123 (2023)	Springer Nature
138.	Hasan Abbas, Mohammad Salman Khan, Sultan Ahmad, M Parvaz, Mohd Bilal Khan, Asim Khan, Ahmad Alshahrie, <b>Zishan H Khan</b>	Reduction of extrinsic defects in ZnSe: perovskite composites based solar devices	Journal of Nanoparticle Research	24 (12), 270 (2022)	Springer Nature
137.	Hasan Abbas, Sultan Ahmad, M Parvaz, Mohd Bilal Khan, Mohammad Salman Khan, Asim Khan, Ahmad Alshahrie, <b>Zishan H Khan</b>	Surface optimization of metal halide perovskite solar cells using ZnS nanorods	Journal of Materials Science: Materials in Electronics	33 (27), 21576-21587 (2022)	Springer Nature
136.	Moh Suhail, Hasan Abbas, Mohd Bilal Khan, <b>Zishan H Khan</b>	Chalcogenide perovskites for photovoltaic applications: a review	Journal of Nanoparticle Research	24 (7), 142 (2022)	Springer Nature
135.	Sundar Singh, <b>Zishan H Khan</b> , Mohd Bilal Khan, Pramod Kumar, Pragati Kumar	Quantum dots-sensitized solar cells: a review on strategic developments	Bulletin of Materials Science	45 (2), 81 (2022)	Indian Academy of Sciences

134.	Mohd Bilal Khan, Numan Salah, <b>Zishan H Khan</b>	Functional enhancement in Alq3 via metal doping and nanoscale synthesis: a review	Applied Nanoscience	12 (5), 1365-1385 (2022)	Springer Nature
133.	Vandana Nagal, Virendra Kumar, Rafiq Ahmad, Marya Khan, <b>Zishan H Khan</b> , Kedar Singh, Hidemitsu Furukawa, Ajit Khosla, Yoon Bong Hahn, Aurangzeb Khurram Hafiz	Emerging Applications of g-C3N4 Films in Perovskite-Based Solar Cells	ECS Journal of Solid State Science and Technology	10 (6), 065001 (2021)	IOP Publishing
132.	Sultan Ahmad, Hasan Abbas, Mohd Bilal Khan, Vandana Nagal, AK Hafiz, <b>Zishan H Khan</b>	ZnO for stable and efficient perovskite bulk heterojunction solar cell fabricated under ambient atmosphere	Solar Energy	216, 164-170 (2021)	Elsevier
131.	Shruti Singh, Pramod K Singh, Sunanda Kakroo, Dhafer Manea Hachim, Pawan S Dhapola, <b>Zishan H Khan</b>	Eco-friendly dye sensitized solar cell using natural dye with solid polymer electrolyte as hole transport material	Materials Today: Proceedings	34, 760-766 (2021)	Elsevier
130.	Shruti Singh, Pramod K Singh, Jitender Paul Sharma, Sunanda Kakroo, Rakesh Sonker, <b>Zishan H Khan</b>	Encompassing environment synthesis, characterization and photovoltaic utilization of cadmium sulphide quantum dots	Materials Today: Proceedings	34, 767-770 (2021)	Elsevier
129.	Azra Parveen, <b>Zishan Husain Khan</b> , Syed Naseem Ahmad	Classification and evaluation of digital forensic tools	Telkomnika	18 (6), 3096-3106 (2020)	Ahmad Dahlan University, UAE
128.	Vandana Nagal, Mohammad Salman Khan, Virendra Kumar, Navjyoti Boora, <b>Zishan H Khan</b> , Kedar Singh, Aurangzeb Khurram Hafiz	Optical study of ZnO nanorods grown via vapour solid growth method for energy harvesting applications	AIP Conference Proceedings	2276 (1) (2020)	AIP
127.	Pramod K Gupta, Deepika Chauhan, <b>Zishan H Khan</b> , Pratima R Solanki	ZrO <sub>2</sub> Nanoflowers Decorated with Graphene Quantum Dots for Electrochemical Immunosensing	ACS Applied Nano Materials	3 (3), 2506-2516 (2020)	ACS
126.	Nafis Ahmad, Zeba Jafri, <b>Zishan H</b>	Evaluation of nanomaterials to prevent oral Candidiasis in	Journal of oral biology and	10 (2), 189-193 (2020)	Elsevier

	<b>Khan</b>	PMMA based denture wearing patients. A systematic analysis	craniofacial research		
125.	M Parvaz, Numan Salah, <b>Zishan H Khan</b>	Photocatalytic properties of TiS <sub>2</sub> nanodisc and Sb@ TiS <sub>2</sub> nanocomposite for methylene blue dye	Optik	207, 163810 (2020)	Urban & Fischer (Germany)
124.	A Parveen, <b>ZH Khan</b> , SN Ahmad	Identification of the forged images using image forensic tools	Communication and Computing Systems	39-45 (2019)	CRC Press
123.	Azra Parveen, <b>Zishan Husain Khan</b> , Syed Naseem Ahmad	Block-based copy–move image forgery detection using DCT	Iran Journal of Computer Science	2, 89-99 (2019)	Springer Nature
122.	M Parvaz, Mohd Bilal Khan, Ameer Azam, <b>Zishan H Khan</b>	Synthesis, characterization, and photocatalytic properties of CuO-TiS <sub>2</sub> nanocomposite	Materials Research Express	6 (12), 125054 (2019)	IOP Publishing
121.	Mohd Bilal Khan, Sultan Ahmad, Mohammad Azim, Numan Salah, <b>Zishan H Khan</b>	Highly luminescent Alq <sub>3</sub> : Zn nanowires	Materials Research Express	6 (10), 105052 (2019)	IOP Publishing
120.	Numan Salah, Ahmed Alshahrie, Najlaa D Alharbi, M Sh Abdel-wahab, <b>Zishan H Khan</b>	Nano and micro structures produced from carbon rich fly ash as effective lubricant additives for 150SN base oil	Journal of Materials Research and Technology	8 (1), 250-258 (2019)	Elsevier
119.	Pramod K Gupta, <b>Zishan H Khan</b> , Pratima R Solanki	Improved electrochemical performance of metal doped Zirconia nanoparticles for detection of Ochratoxin-A	Journal of Electroanalytical Chemistry	829, 69-80 (2018)	Elsevier
118.	Pramod K Singh, M Parvaz, Sultan Ahmed, Rakesh K Sonker, B Bhattacharya, <b>Zishan H Kha8899n</b>	Less toxic tin incorporated perovskite solar cell using polymer electrolyte processed in the air	Optik	169, 166-171 (2018)	Urban & Fischer (Germany)
117.	Pramod K Singh, B Bhattacharya, <b>Zishan H Khan</b>	Environment approachable dye sensitized solar cell using abundant natural pigment-based dyes with solid polymer electrolyte	Optik	165, 186-194 (2018)	Urban & Fischer (Germany)
116.	M Parvaz, NA Salah, <b>ZH Khan</b>	Effect of ZnO nanoparticles doping on the optical properties of TiS <sub>2</sub> discs	Optik	171, 183-189 (2018)	Urban & Fischer (Germany)
115.	Mohammad Bilal Khan, Sultan Ahmad, M Parvaz, Rahul, <b>Zishan H Khan</b>	Synthesis and characterization of Au incorporated Alq <sub>3</sub> nanowires	AIP Conference Proceedings	1953 (1), 030263 (2018)	AIP Publishing

114.	Sultan Ahmed, M Parvaz, Rahul Johari, M Bilal, Sultan Ahmad, M Zaid, S Hussain, Islamuddin, <b>Zishan H Khan</b> , M Rafat	Hydrothermal synthesis of poly (3, 4-ethylenedioxythiophene) for high-rate performance supercapacitor	AIP Conference Proceedings	1953 (1) (2018)	AIP Publishing
113.	M. Parvaz, Sultan Ahmed, Mohd Bilal Khan, Rahul, Sultan Ahmad and <b>Zishan H. Khan</b>	Synthesis of TiS <sub>2</sub> Nanodiscs for Supercapacitor Application	AIP Conference Proceedings	1953 (1) (2018)	AIP Publishing
112.	M Parvaz, <b>Zishan H Khan</b>	Optical properties of pure and PbSe doped TiS <sub>2</sub> nanodiscs	Materials Research Express	5 (6), 065013 (2018)	IOP Publishing
111.	Pramod Kumar Gupta, <b>Zishan H Khan</b> , Pratima R Solanki	Effect of Nitrogen Doping on Structural and Electrochemical Properties of Zirconia Nanoparticles	Advanced Science Letters	24 (2), 867-872 (2018)	American Scientific Publishers
110.	Singh, Pramod K., Rahul Singh, Vijay Singh, B. Bhattacharya, and <b>Zishan H. Khan</b>	New class of lead-free perovskite material for low-cost solar cell application	<u>Materials Research Bulletin</u>	97, 572-577 (2018)	Elsevier
109.	Md. Tanweer Ashraf, Numan Salah, M. Rafat and <b>Zishan H. Khan</b>	Synthesis and characterization of Indium doped Lead chalcogenides (PbSe) <sub>100-x</sub> In <sub>x</sub> thin films composed of QDs	Journal of Alloys and Compounds	701, 850-857 (2017)	Elsevier
108.	Pramod K Gupta, Namrata Pachauri, <b>Zishan H Khan</b> , Pratima R Solanki	One pot synthesized zirconia nanoparticles embedded in amino functionalized amorphous carbon for electrochemical immunosensor	Journal of Electroanalytical Chemistry	807, 59-69 (2017)	Elsevier
107.	Sultan Ahmed, <b>Zishan H Khan</b> , M Rafat	Studies on MnO <sub>2</sub> nanorods and their application for supercapacitor	Current Nanomaterials	2 (1), 45-52 (2017)	Bentham Science Publishers
106.	Alshahrie A., Salah, N. and <b>Zishan H. Khan</b>	Effect of $\gamma$ -irradiation on electrical transport properties of ZnTe thin films composed of nanostructures	Materials Express	7 (3), 189-198 (2017)	American Scientific Publishers
105.	Rahul Singh, B Bhattacharya, Meenal Gupta, <b>Zishan H Khan</b> , SK Tomar, Vijay Singh, Pramod K Singh	Electrical and structural properties of ionic liquid doped polymer gel electrolyte for dual energy storage devices	International Journal of Hydrogen Energy	42 (21), 14602-14607 (2017)	Elsevier
104.	Salah, N. Abdel-wahab, M.S., Habib, S.S.,	Lubricant Additives Based on Carbon Nanotubes Produced from Carbon-Rich Fly Ash	Tribology Transactions	60 (1), 166-175 (2017)	Taylor and Francis

	<b>Zishan H. Khan</b>				
103.	Mohammad Bilal Khan and <b>Zishan H. Khan</b>	Ag-incorporated Alq3 nanowires: Promising material for organic luminescent devices	Journal of Luminescence	188, 418-422 (2017)	Elsevier
102.	Salah, N., Abdel-Wahab, M.S., Alshahrie, A., Alharbi, N.D. and <b>Zishan H. Khan</b>	Carbon nanotubes of oil fly ash as lubricant additives for different base oils and their tribology performance	RSC Advances	7 (64), 40295-40302 (2017)	Royal Society of Chemistry
101.	Numan Salah, Ahmed Alshahrie, M.Sh.Abdel-wahab, Najlaa D.Alharbi, <b>Zishan H. Khan</b>	Carbon nanotubes of oil fly ash integrated with ultrathin CuO nanosheets as effective lubricant additives	Diamond and Related Materials	78, 97-104 (2017)	Elsevier
100.	P. K. Gupta, S. Tiwari, <b>Z. H. Khan</b> , P. R. Solanki	Amino acid Functionalized ZrO <sub>2</sub> Nanoparticles decorated Reduced Graphene Oxide based Immunosensors	Journal of Materials Chemistry	5 (10), 2019-2033 (2017)	Royal Society of Chemistry
99.	Pramod K Singh, Rahul Singh, Vijay Singh, SK Tomar, Rahul, B. Bhattacharya , <b>Zishan H. Khan</b>	Effect of crystal and powder of CH <sub>3</sub> NH <sub>3</sub> I on the CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> based Perovskite sensitized solar cell	Materials Research Bulletin	89, 292-296 (2017)	Elsevier
98.	M. Parvaz, Pramod K. Gupta, Pratima Solanki, <b>Zishan H Khan</b>	Studies on As-synthesized Graphene Oxide Flakes	Current Nano-Material	1 (3), 164-170 (2016)	Bentham Science
97.	PK Gupta, A Gupta, SR Dhakate, <b>Zishan H. Khan</b> , PR Solanki	<u>Functionalized polyacrylonitrile-nanofiber based immunosensors for Vibrio cholerae detection</u>	Applied Polymer Science	133 (44) (2016)	Wiley
96.	Numan Salah, Sami S. Habib, <b>Zishan H. Khan</b> , Ahmed Alshahrie, Adnan Memic , Attieh A. Al-ghamdi	Carbon rich fly ash and their nanostructures	Carbon Letter	19, 23-31 (2016)	Carbon letter (Singapore)
95.	Pramod K.Gupta, <b>Zishan H. Khan</b> , and Pratima R. Solanki	One-Step Electrodeposited Porous ZnO Thin Film Based Immunosensor for Detection of Vibrio cholerae Toxin	Electrochemical Society	163 (7), B309 (2016)	ECS
94.	Pramod K.Gupta, Prem Prakash Sharma, Anshu Sharma, <b>Zishan H. Khan</b> , and Pratima R. Solanki	Electrochemical and Antimicrobial Activities of Tellurium Oxide nanoparticles	Materials Science and Engineering B	211, 166-172 (2016)	Elsevier
93.	Md Tanweer Ashraf, Numan A. Salah, M. Rafat,	Optical Studies on Zn doped Lead Chalcogenide (PbSe) <sub>100-x</sub> Zn <sub>x</sub> thin films	Thin Solid Films	612, 109-115 (2016)	Elsevier

	M. Zulfequar, and <b>Zishan H. Khan</b>	composed of nanoparticles			
92.	Rahul, B. Bhattacharya, Pramod K. Singh & <b>Zishan H. Khan</b>	Perovskite sensitized solar cell using solid polymer electrolyte	International Journal of Hydrogen Energy	41 (4), 2847-2852 (2016)	Elsevier
91.	Najlaa D Alharbi, M Shahnawaze Ansari, Numan Salah, Suzan A Khayyat & <b>Zishan H. Khan</b>	Zinc Oxide-Multi Walled Carbon Nanotubes Nanocomposites for Carbon Monoxide Gas Sensor Application	Journal of Nano science and Nanotechnology	16 (1), 439-447 (2016)	ASP
90.	N Salah, AA Al-ghamdi, A Memic, SS Habib & <b>Zishan H. Khan</b>	Formation of Carbon Nanotubes from Carbon-Rich Fly Ash: Growth Parameters and Mechanism	Materials and Manufacturing Processes	31 (2), 146-156 (2016)	Taylor & Francis
89.	Numan Salah, Sami S Habib, <b>Zishan H Khan</b> , Rajeev Kumar, MA Barakat	UV-irradiated carbon nanotubes synthesized from fly ash for adsorption of congo red dyes in aqueous solution	Desalination and Water Treatment	57 (45), 21534-21544 (2016)	Taylor & Francis
88.	<b>Zishan H. Khan</b>	Electrical Properties of Carbon Nanotubes (CNTs) Decorated with Gold Nanoparticles Film.	Advanced Science Letters	20 (7-8), 1471-1474 (2014)	ASP
87.	Mohd. Bilal Khan, <b>Zishan H.Khan</b>	Studies on Alq3 Nanorods	Advanced Science Letters	20 (7-8), 1692-1694 (2014)	ASP
86.	<b>Zishan H. Khan</b> , NA Salah, MS Ansari, AF Sherwani, S Habib	Studies on Carbon Mono-Oxide Gas Sensing of Carbon Nanotubes Film	Advanced Science Letters	20 (7-8), 1597-1600 (2014)	ASP
85.	SA Khan, G Tiwari, RP Tripathi, MA Alvi, <b>Zishan H. Khan</b> , FA Al-Agel	Structural, Optical and Electrical Characterization of Polycrystalline Ga <sub>15</sub> Te <sub>85-x</sub> Zn <sub>x</sub> Nano-Structured Thin Films.	Advanced Science Letters	20 (7-8), 1715-1718 (2014)	ASP
84.	<b>Zishan H. Khan</b> , NA Salah, MS Ansari, SS Habib	Carbon Mono-Oxide Gas Sensing Based on Multi-Walled Carbon Nanotubes Decorated with Gold Nanoparticles Based Film Sensors.	Advanced Science Letters	20 (7-8), 1268-1273 (2014)	ASP
83.	N Salah, SS Habib, <b>Zishan H. Khan</b> , ND Alharbi	Synthesis and characterization of pure and Tb/Cu doped Alq3 nanostructures.	Journal of Luminescence	143, 640-644 (2013)	Elsevier
82.	<b>Zishan H. Khan</b>	Glass transition kinetics in ball milled amorphous GaxTe100-x nanoparticles.	Journal of Non-Crystalline Solids	380, 109-113 (2013)	Elsevier
81.	N Salah, SS Habib, <b>Zishan H. Khan</b>	Highly Luminescent Material Based on Alq3: Ag Nanoparticles.	Journal of fluorescence	23, 1031-1037 (2013)	Springer Nature
80.	A Azam, F Ahmed, SS Habib, <b>Zishan</b>	Fabrication of Co-doped ZnO nanorods for spintronic	Metals and Materials	19, 845-850 (2013)	Springer Nature



	<b>H. Khan, NA Salah</b>	devices.	International		
79.	<b>M. A. Alvi, Zishan H. Khan</b>	Synthesis and characterization of nanoparticles of $((\text{PbSe})_{100-x}\text{Cd}_x)$ lead chalcogenides.	Nanoscale Research Letters	8, 1-10 (2013)	Springer Nature
78.	F. A. Al-Agel, E. A. Al-Arfaj, F. M. Al-Marzouki, Shamshad A. Khan, <b>Zishan H. Khan</b> , and A. A. Al-Ghamdi	Phase transformation kinetics and optical properties of Ga–Se–Sb phase-change thin films.	Materials science in semiconductor processing	16 (3), 884-892 (2013)	Elsevier
77.	Numan Salah, Sami S. Habib, Adnan Memic, NajlaaD.Alharbi, Saeed S. Babkair, <b>Zishan H. Khan</b>	Syntheses and characterization of thin films of $\text{Te}_{94}\text{Se}_6$ nanoparticles for semiconducting and optical devices.	Thin Solid Films	531, 70-75 (2013)	Elsevier
76.	F. A. Al-Agel, E. A. Al-Arfaj, F. M. Al-Marzouki, Shamshad A. Khan, <b>Zishan H. Khan</b> , and A. A. Al-Ghamdi	Kinetics of Phase Transformation in Nanostructured Ga–Se–Te Glasses.	Journal of Nanoscience and Nanotechnology	13 (3), 2001-2007 (2013)	ASP
75.	F. A. Al-Agel, Shamshad A. Khan, F. M. Al-Marzouki, A. A. Al-Ghamdi, <b>Zishan H. Khan</b> , M. Zulfequar	Influence of laser-irradiation on structural and optical properties of phase change $\text{Ga}_{25}\text{Se}_{75-x}\text{Te}_x$ thin films.	Materials Letters	92, 424-426 (2013)	Elsevier
74.	<b>Zishan H. Khan</b> , Ameer Azam, Numan A. Salah & Sami Habib	Study of structure-dependent response kinetics of porous silicon for selective detection of organic vapors.	Philosophical magazine letters	93 (1), 1-8 (2013)	Taylor & Francis
73.	<b>Zishan H. Khan</b> , M. A. Alvi, Shamshad A. Khan	Study of glass transition and crystallization behavior in $\text{Ga}_{15}\text{Se}_{85-x}\text{Pb}_x$ ( $0 \leq x \leq 6$ ) chalcogenide glasses.	Acta Physica Polonica	123 (1), 80-86 (2013)	Acta. Phys. (Poland)
72.	Numan Salah, Sami S Habib, <b>Zishan H Khan</b>	Direct bandgap materials based on the thin films of $\text{SexTe}_{100-x}$ nanoparticles.	Nanoscale Research Letters	7, 1-8 (2012)	Springer Nature
71.	<b>Zishan H. Khan</b> , A. Al-Ghamdi & Faisal A. Al-Agel	Crystallization kinetics in as-synthesis high yield of $\text{a-Se}_{100-x}\text{Te}_x$ nanorods.	Mater. Chem. Phys.	134 (1), 260-265 (2012)	Elsevier
70.	N Salah, SS Habib, <b>Zishan H. Khan</b>	Direct Bandgap Material Based on Thin Film of $\text{Te}_{97}\text{Ga}_3$ Nanoparticles.	ECS Journal of Solid State Science and Technology	1 (5), Q96 (2012)	ECS
69.	N Salah, SS Habib, <b>Zishan H. Khan</b> , Amemic, MN Nahas	Growth of Carbon Nanotube On Catalysts Obtained From Carbon Rich Fly Ash.	Digest Journal of Nanomaterials and Biostructures	7 (3), 1279-1288 (2012)	Nat. Inst. R&D Material Phys.

68.	Numan Salah, Sami Habib, <b>Zishan H. Khan</b> , EsamAlarfaj and Shamshad A. Khan	Synthesis and characterization of $\text{Se}_{35}\text{Te}_{65-x}\text{Ge}_x$ nanoparticle films and their optical properties.	Journal of Nanomaterial	2012, 6-6 (2012)	Hindawi
67.	<b>Zishan H. Khan</b> , Numan Salah, Sami S. Habib, A. Azam and M.S. Al-Shahawi	Multi-walled carbon nanotubes film sensor for carbon mono-oxide gas.	Current Nanoscience	8(2):274-279 (2012)	Bentham Science
66.	<b>Zishan H. Khan</b>	Glass Transition Kinetics of $\text{a-Se}_x\text{Te}_{100-x}$ nanoparticles	Science of Advanced Materials	4 (2), 232-238 (2012)	ASP
65.	A.A. Al-Ghamdi, Shamshad A. Khan & <b>Zishan H. Khan</b>	Electrical transport in cobalt catalyzed multi-wall carbon nanotubes.	Advanced Science Letters	16 (1), 377-380 (2012)	ASP
64.	<b>Zishan H. Khan</b> , Shamshad A. Khan, Numan Salah, Sami Habib and A. A. Al-Ghamdi	Electrical and Optical properties of $\text{a-Se}_x\text{Te}_{100-x}$ thin films	Optics & Laser Technology	44 (1), 6-11 (2012)	Elsevier
63.	<b>Zishan H. Khan</b> , N. Salah, Sami Habib & S. A. Khan	Kinetics of non-isothermal crystallization in $\text{Ga}_{15}\text{Se}_{76}\text{Pb}_9$ Chalcogenide Glasses by Differential Scanning Calorimeter (DSC).	Chalcogenide Letters	8 (10), 615-622 (2011)	National Institute R and D of Materials Physics.
62.	<b>Zishan H. Khan</b> , M. Shahnawaze Ansari, Numan Salah, Sami S. Habib and M.S. Al-Shahawi	Cobalt catalyzed multi-walled carbon nanotubes film sensor for carbon mono-oxide gas.	Digest Journal of Nanomaterials and Biostructures	6 (4) (2011)	Nat. Inst. R&D Material Phys.
61.	<b>Zishan H. Khan</b>	Non-Isothermal Crystallization in Amorphous $\text{Ga}_x\text{Se}_{100-x}$ Nanorods	Japanese Journal of Applied Physics	50 (10R), 105603 (2011)	Japan Society of Applied Physics
60.	Numan Salah, Sami S Habib, <b>Zishan H Khan</b> , Adnan Memic, Ameer Azam, EsamAlarfaj, NabeelZahed and Salim Al-Hamedi	High-energy ball milling technique for ZnO nanoparticles as antibacterial material.	International Journal of Nanomedicine	863-869 (2011)	Dove Press (New Zealand)
59.	Numan Salah, Sami S. Habib, <b>Zishan H. Khan</b> , FathiDjouider	Thermoluminescence and photoluminescence of $\text{ZrO}_2$ nanoparticles.	Radiation Physics and Chemistry	80 (9), 923-928 (2011)	Elsevier
58.	Ravi Keshwar Kumar, M. Husain and <b>Zishan H. Khan</b>	Optical Studies on amorphous ZnO film.	Digest Journal of Nanomaterials and Biostructures	6 (3), 1317-1323 (2011)	Nat. Inst. R&D Material Phys.
57.	<b>Zishan H. Khan</b> , A. A. Al-Ghamdi,	Morphology and optical properties of thin films of a-	Nanoscience & Nanotechnology	3 (3), 319-323 (2011)	ASP

	Shamshad A. Khan, Sami Habib & Numan Salah	Ga <sub>x</sub> Se <sub>100-x</sub> nanoparticles.	Letters		
56.	<b>Zishan H. Khan</b> , Shamshad A. Khan, Numan Salah, A. A. Al-Ghamdi & Sami Habib	Electrical properties of thin films of a-Ga <sub>x</sub> Te <sub>100-x</sub> composed of nanoparticles.	Philosophical magazine letters	91 (3), 207-213 (2011)	Taylor & Francis
55.	Numan Salah, <b>Zishan H Khan</b> , Sami S Habib	Nanoparticles of Al <sub>2</sub> O <sub>3</sub> : Cr as a sensitive thermoluminescent material for high exposures of gamma rays irradiations.	Nuclear Instruments and Methods in Physics Research	269 (4) (2011)	Elsevier
54.	<b>Zishan Husain Khan</b> , Numan Salah and Sami S. Habib	Electrical Transport properties of thin film of a-Se <sub>87</sub> Te <sub>13</sub> Nanorods.	Journal of Experimental Nanoscience	6 (4), 337-348 (2011)	Taylor & Francis
53.	Numan Salah, Sami S Habib, <b>Zishan H Khan</b>	Quantum Effect on the Energy Levels of Eu <sup>2+</sup> Doped K <sub>2</sub> Ca <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> Nanoparticles.	Journal of Fluorescence	20, 1009-1015 (2010)	Springer Nature
52.	<b>Zishan H. Khan</b> , Shamshad A. Khan, Numan Salah, Sami Habib, S. M. Abdallah El-Hamidy, A. A. Al-Ghamdi	Effect of composition on electrical and optical properties of thin films of amorphous Ga <sub>x</sub> Se <sub>100-x</sub> nanorods	Nanoscale research letters	5, 1512-1517 (2010)	Springer Nature
51.	<b>Zishan H. Khan</b> , Islamuddin, Numan Salah, Sami Habib, S. M. Abdallah El-Hamidy, M. Rafat and M. Husain.	Electrical and Optical Characterization of ZnO thin film.	International Journal of Nanoscience	9 (05), 423-429 (2010)	World Scientific
50.	Numan Salah, Sami S. Habib and <b>Zishan H. Khan</b>	The nanoparticles of BaSO <sub>4</sub> :Eu as detectors for high doses of different ionizing radiations	Atoms for peace: An International journal	3 (2), 84-92 (2010)	Inderscience
49.	Shamshad A. Khan, <b>Zishan H. Khan</b> , A. Sibae, A. A. Al-Ghamdi	Structural, optical and electrical properties of cadmium doped lead chalcogenide (PbSe) thin films.	PHYSICA B: Condensed Matter	405 (16), 3384-3390 (2010)	Elsevier
48.	<b>Zishan H. Khan</b> , S. Khan and M. Husain	Variable range hopping in carbon nanotubes.	Current Nanoscience	6(6) 626 – 641 (2010)	Bentham Science
47.	<b>Zishan H. Khan</b> & M. Husain	Electrical and Optical Properties of thin film of a-Se <sub>70</sub> Te <sub>30</sub> Nanorods	Journal of Alloys and Compounds	486 (1-2), 774-779 (2009)	Elsevier
46.	<b>Zishan H. Khan</b>	Electrical and Optical properties of thin film of amorphous silicon nanoparticles.	Applied Surface Science	255 (21), 8874-8878 (2009)	Elsevier

45.	Sami S Habib, <b>Zishan H KHAN</b> , Numan A Salah	Nanoparticles: A State-Of-The-Art In Scientific Research	International journal of nanoparticles	2009	Inderscience
44.	Numan Salah, Sami Habib, <b>Zishan H. Khan</b> , Salim Al-Hamdi and Fathi Djouider	Functionalization of gold and carbon nanostructured materials using gamma ray irradiation	Radiation Physics and Chemistry	78 (11), 910-913 (2009)	Elsevier
43.	<b>Zishan H. Khan</b> , Numan A. Salah and Sami S. Habib	Electrical Transport Properties of Ni <sub>95</sub> Ti <sub>5</sub> Catalyzed Multi wall Carbon Nanotubes Film.	Journal of Nanomaterials (USA)	2009, 1-8 (2009)	Hindawi
42.	Numan A. Salah, Sami Habib, <b>Zishan H. Khan</b> and S. P. Lochab	Nanoparticles of BaSO <sub>4</sub> :Eu for Heavy Dose Measurements.	Journal of Luminescence	129 (3), 192-196 (2009)	Elsevier
41.	<b>Zishan H. Khan</b> , Numan A. Salah and Sami S. Habib	Optical properties of Silicon nanoparticles synthesized at different heating rates via physical vapour condensation method	International Journal of Nanoparticles	2 (1-6), 380-387 (2009)	InderScience
40.	KarunapatiTripathi , M.Husain, Numan A. Salah, Sami S. Habib, Salim Al-Hamedi, NabeelZakiZahid and <b>Zishan H. Khan</b>	Studies on ZnO nanorods	International Journal of Nanoparticles	2 (1-6), 148-155 (2009)	InderScience
39.	KarunapatiTripathi , M.Husain, Islam Uddin, Sami S. Habib, <b>Zishan H. Khan</b>	Synthesis and Characterization of ZnO nanoparticles	International Journal of Nanoparticles	2 (1-6), 129-137 (2009)	InderScience
38.	Islam Uddin, KarunapatiTripathi , M.Husain, Shamshad A. Khan, S. M. Abdullah EL_Hamidy and <b>Zishan H. Khan</b>	Electrical Transport Properties of ZnO nanostructures	International Journal of Nanoparticles	2 (1-6), 81-88 (2009)	InderScience
37.	<b>Zishan H. Khan</b> , Numan A. Salah and Sami S. Habib	Electrical Transport in Ni catalyzed multi-walled carbon nanotubes	International Journal of Nanoparticles	2 (1-6), 138-147 (2009)	InderScience
36.	<b>Zishan H. Khan</b> , Sami Habib, Numan Salah, Shamshad A. Khan, Samina Khan and M. Husain	J-E characteristics of Ni-catalyzed multiwalled carbon nanotubes	International Journal of Nano and Biomaterials	2 (1-5), 226-233 (2009)	InderScience
35.	KarunapatiTripathi , <b>Zishan H. Khan</b> ,	I-V Characteristics of Multi-walled Carbon Nanotubes	International Journal of	2 (1-6), 58-65 (2009)	InderScience

	M. Husain and M. Zulfeqar	synthesized using ECR-CVD	Nanoparticles		
34.	Karunapati Tripathi, <b>Zishan H. Khan</b> , M. Zulfeqar and M. Husain	Synthesis and Characterization of Sea Urchin like Nanostructures of ZnO on Si (100)	International Journal of Nanoparticles	2 (1-6), 111-118 (2009)	InderScience
33.	J. K. Lal, Shamsad A. Khan, <b>Zishan H. Khan</b> , A. A. Al-Ghamdi	Characterization of amorphous $Se_{97}Te_3$ nanoparticles prepared by ball milling	International Journal of Nanomanufacturing	4 (1-4), 208-218 (2009)	Inderscience
32.	Sami S Habib, Numan Salah, <b>Zishan H Khan</b> , S. Al- Heniti, F S Al-Hazmi, Shamsad A Khan and Adel S Faidah	Synthesis and Characterization of Tin Dioxide Nanoparticles and effect of annealing temperature.	International Journal of Nanoparticles	2 (1-6), 263-269 (2009)	InderScience
31.	Numan A. Salah, <b>Zishan H. Khan</b> , Sami Habib and Ahmed Al-Ghamdi	Optical Properties of LiF:Mg,Cu,P nanorods.	International Journal of Nano and Biomaterials	2 (1-5), 118-125 (2009)	InderScience
30.	Numan Salah, <b>Zishan H. Khan</b> , Sami S. Habib.	Copper activated LiF nanorods as TLD material for high exposures of gamma-rays.	Nuclear Instr. & Methods in Phys.	267 (21-22) 3562-3565 (2009)	Elsevier
29.	Numan Salah, Sami Habib, <b>Zishan H. Khan</b> , S.P. Lochab, D. Kanjilal, RanjuRanjann, V.E. Aleynikov and A.A. Rupasov.	Nanorods of LiF: Mg, Cu, P as detectors for Mixed Field Radiations	IEEE Transactions on Nanotechnology	7 (6), 749-753 (2008)	IEEE
28.	Anis Ahmad, S. A. Khan, Kirti Sinha, Lokesh Kumar, <b>Zishan H. Khan</b> , M. Zulfeqaur and M. Husain	Optical Characterization of vacuum evaporated $a-Se_{80}Te_{20-x}Cu_x$ thin films.	Vacuum	7 (6), 749-753 (2008)	Elsevier
27.	<b>Zishan Husain Khan</b> , M. Husain, Numan Salah and Sami Habib	Electrical Transport via Variable Range Hopping in Individual Multi-wall Carbon Nanotube	Journal of Physics: Condensed Matter	20 (47), 475207 (2008)	Elsevier
26.	Monika Aggarwal, M.Husain, Samina Khan and <b>Zishan H. Khan</b>	Variable range hopping in Fe <sub>70</sub> Pt <sub>30</sub> catalyzed multiwalled carbon nanotubes.	European Physical Journal B	60, 319-324 (2007)	Springer Nature
25.	Samina Khan, K. N. Tripathi M. Husain, and <b>Zishan H. Khan</b>	Field emission properties of Fe <sub>70</sub> Pt <sub>30</sub> catalysed multiwalled carbon nanotubes.	Journal of Experimental Nano-science	2 (3), 215-228 (2007)	Taylor & Francis
24.	S. A. Khan, <b>Zishan H. Khan</b> , M. Zulfeqaur and	Kinetics Study of $a-Se_{80}Te_{20-x}Pb_x$ using non-isothermal crystallization.	PHYSICA B: Condensed Matter	400 (1-2), 180-184 (2007)	Elsevier

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23.	Samina Khan, <b>Zishan H. Khan</b> , K. N. Tripathi and M. Husain,	Synthesis of Carbon nanotubes using Ni <sub>95</sub> Ti <sub>5</sub> nanocrystalline film as a catalyst.	Journal of nanoscience and nanotechnology	7 (6), 1855-1859 (2007)	ASP
22.	Monika Aggarwal, M.Husain,Samina Khan and <b>ZishanH.Khan</b>	Electrical conduction mechanism in Fe <sub>70</sub> Pd <sub>30</sub> catalyzed multi-wall carbon nanotubes.	Journal of nanoparticle research	9, 1047-1055 (2007)	Springer Nature
21.	Meng-Yen Tsai, Chung-Yi Yu, Chien-Hsin Yang, Nyan-Hw Tai, Tsong-PyngPerng, Chien-Ming Tu, <b>Zishan H. Khan</b> , Yang-Chung Lio and Cheng Chung Chi	Electrical Transport Properties of an Individual disordered multiwalled carbon nanotube.	Applied Physics Letters	89 (19) (2006)	American Institute of Phys.
20.	<b>Zishan H. Khan</b> and M. Husain	Nanodiamond: Synthesis, Transport Property, Field Emission and applications.	Materials Science Research India	3 (1a), 1-22 (2006)	Oriental Scientific Publishing Company
19.	<b>Zishan H. Khan</b> , Samina Khan, T. P. Perng and M. Husain	Characterization of Carbon nanotubes grown on Fe <sub>70</sub> Pd <sub>30</sub> films	PHYSICA B: Condensed Matter	373 (2), 317-322 (2006)	Elsevier
18.	A. Ahmad, S. A. Khan, K. Sinha, <b>Zishan H. Khan</b> , M. Zulfeqaur and M. Husain	Differential Scanning Calorimetric Study of a-Se <sub>80</sub> Te <sub>20-x</sub> Cu <sub>x</sub> chalcogenide glasses.	PHYSICA B: Condensed Matter	382 (1-2), 92-97 (2006)	Elsevier
17.	Sushil Kumar, <b>Zishan H. Khan</b> , M. A. Majeed Khan and M. Husain	Studies on thin films of lead chalcogenides.	Current Applied Physics	5 (6), 561-566 (2005)	Elsevier
16.	<b>Zishan H. Khan</b> and M. Husain	Carbon nanotube and its possible applications.	Indian Journal Of Engineering And Materials Sciences	2005	Scientific Publishers
15.	S. A. Khan, M. Zulfequar, <b>Zishan H. Khan</b> and M. Husain	Effect of Annealing on the optical band gap of amorphous Ga <sub>5</sub> Se <sub>90-x</sub> Sb <sub>x</sub> during crystallization.	Journal of Modern Optics	50 (1), 51-62 (2003)	Taylor & Francis
14.	S. A. Khan, M. Zulfeqaur, M. Ilyas, <b>Zishan H. Khan</b> and M. Husain	Optical and Electrical Properties of Glassy Ga <sub>10</sub> Te <sub>90-x</sub> Sb <sub>x</sub> alloys	Optical materials	20 (3), 189-196 (2002)	Elsevier
13.	<b>Zishan H. Khan</b> , Kh. Selima Begum, M. Zulfequar, M. Ilyas	Electrical and Thermal Properties of a-(Se <sub>70</sub> Te <sub>30</sub> ) <sub>100-x</sub> (Se <sub>98</sub> Bi <sub>2</sub> ) <sub>x</sub> alloys	Current Applied Physics	2 (2), 167-174 (2002)	Elsevier

	and M. Husain				
12.	<b>Zishan H. Khan,</b> A. Kumar, M. Zulfeqaur, M. Ilyas and M. Husain	Electrical Conductivity and Thermo-electric Power in a- $\text{Se}_{80-x}\text{In}_x$ & a- $\text{Se}_{80-x}\text{Ge}_{20}\text{Te}_x$ Thin Films.	Canadian journal of physics	80 (1), 19-27 (2002)	NRC Research Press (Canada)
11.	<b>Zishan H. Khan,</b> M. Zulfeqaur, M. Ilyas and M. Husain	Electrical Conductivity and Thermo-electric Power of a- $\text{Se}_{80-x}\text{Ga}_{20}\text{Te}_x$ Thin Films.	Acta Physica Polonica	Series A 98 (2000)	Acta. Phys. (Poland)
10.	M. Ilyas, M. Zulfeqaur, <b>Zishan H. Khan</b> and M. Husain.	Dielectric Properties of a- $\text{Ga}_x\text{Se}_{100-x}$ alloys.	PHYSICA B: Condensed Matter	254 (1-2), 57-69 (1998)	Elsevier
9.	M. Ilyas, M. Zulfeqaur, <b>Zishan H. Khan</b> and M. Husain.	Optical band gap and optical constants in a- $\text{Ga}_x\text{Te}_{100-x}$ thin films.	Optical Materials	11 (1), 67-77 (1998)	Elsevier
8.	M. Husain, <b>Zishan H. Khan</b> and P. K. Bhatnagar	$\text{Ga}_{40}\text{Se}_{60}$ ; A Material for Photovoltaic Applications.	Solar Energy Materials and Solar Cell	55 (1-2), 11-14 (1998)	Elsevier
7.	<b>Zishan H. Khan,</b> M. Zulfeqaur, M. Manzar Malik and M. Husain	Effect on Sb on Transport Properties of a- $\text{Se}_{80-x}\text{Ga}_{20}\text{Sb}_x$ Thin Films.	Jap. J. Applied Physics	37, 23 (1998)	Japan Society of Applied Physics
6.	<b>Zishan H. Khan,</b> M. Zulfeqaur & M. Husain	Optical Properties of a- $\text{Se}_{80-x}\text{Ga}_{20}\text{Te}_x$ Thin Films.	Journal of optics	28 (4), 151 (1997)	IOP Science
5.	<b>Zishan H. Khan,</b> M. Zulfeqaur, M. Manzar Malik & M. Husain	Electrical Transport Properties of Thin Films of a- $\text{Se}_{80-x}\text{Ga}_{20}\text{Bi}_x$ .	Materials Science & Technology	13 (6), 484-488 (1997)	Maney Publishing
4.	<b>Zishan H. Khan,</b> M. Zulfeqaur, T. P. Sharma & M. Husain	Optical Properties of a- $\text{Se}_{80-x}\text{Ga}_{20}\text{Sb}_x$ Thin Films.	Optical Materials	6 (3), 139-146 1996	Elsevier
3.	M. Manzar Malik, <b>Zishan H. Khan</b> & M. Husain	Electrical Transport Properties of Glassy Semiconducting $\text{Se}_{70-x}\text{Ga}_{30}\text{Te}$	Materials Science Forum	223, 275-278 (1996)	Trans Tech Pub. (Switzerland)
2.	<b>Zishan H. Khan,</b> M. Ilyas & M. Husain	Optical Properties of a- $\text{Se}_{80-x}\text{Ga}_{20}\text{Bi}_x$ Thin Films.	Materials Science Forum	223, 321-324 (1996)	Trans Tech Pub. (Switzerland)
1.	<b>Zishan H. Khan,</b> M. Manzar Malik, M. Zulfeqaur & M. Husain	Electrical Conduction Mechanism in a- $\text{Se}_{80-x}\text{Ga}_{20}\text{Te}_x$ Films.	Journal of physics. Condensed matter	7 (47), 8979-8991 (1995)	IOP Pub.

**(E) Conferences and workshops**

S.No.	Title of Abstract/ Paper	Title	Theme	Venue	Date (s)
36.	Surface optimization of Perovskite absorber layer for the fabrication of efficient and stable solar cell	International Online Conference on Nano Materials (ICN 2021)	Nano Material	Mahatma Gandhi University, Kottayam, Kerala, India	9-11 April 2021
35.	Synthesis and Characterization of Perovskite based photoactive layer for Bulk Heterojunction Junction (BHJ) Hybrid Solar Cell	International Conference on Perovskite & Hybrid Photovoltaics (ICPHPV-2019),	Renewable Energy and Perovskite Solar cell	IIT Delhi, New Delhi	February 2019
34.	Lead free perovskite material for efficient and stable photovoltaic cell fabrication	International Conference on Perovskite & Hybrid Photovoltaics (ICPHPV-2019),	Renewable Energy and Perovskite Solar cell	IIT Delhi, New Delhi	February 2019
33.	Identification of the forged images using image forensic tools	Communication and Computing Systems: Proceedings of the 2nd International Conference on Communication and Computing Systems (ICCCS 2018),	Computing Systems	Gurgaon, India	December 1-2, 2018
32.	Electro spun polyacrylonitrile nanofibers based immunosensors for the detection of Vibrio cholera	3 <sup>rd</sup> International Conference on Nanostructured Materials and Nanocomposites	Nanotechnology	Farah, U.P. India	12-14 Dec, 2015
31.	Effect of Te incorporation on structural and optical properties of ZnO Nanostructured film	15 <sup>th</sup> International Workshop on Physics of Semiconductor Devices (IWPSD-2015)	Semiconductor Device	IISc Bangalore, India	7-10 Dec, 2015
30.	Perovskite sensitized solar cell using solid polymer electrolyte	International Conference on Functional	Material Science	Kualalumpur, Malaysia	04-06 Aug, 2015



		Materials and Devices			
29.	CH <sub>3</sub> CH <sub>2</sub> NH <sub>3</sub> PbI <sub>3</sub> Perovskite: A promising semiconducting material for solar cell	International Photovoltaic Solar Energy Conference-Solar Asia	Renewable Energy	Pune, India	2015
28.	Synthesis and Characterization of CH <sub>3</sub> CH <sub>2</sub> NH <sub>3</sub> PbI <sub>3</sub> Perovskite and its photovoltaic Performance	Conference on Nanodevices	Nanotechnology	Mathura, India	2015
27.	Electrodeposited porous ZnO films exhibiting enhanced performance in biosensors	International Conference on Recent Advances in Nanoscience and Nanotechnology	Nanotechnology	Chennai, India	8-10 July, 2015
26.	Optimization of Tellurium Thin Film using Electrochemical Technique for Biosensor	International Conference on Recent Advances in Nanoscience and Nanotechnology	Nanotechnology	New Delhi, India	15-16 Dec, 2014
25.	Synthesis and Characterization of a-GaTe Nanoparticles	Recent trends in National Conference on Advanced Trends in Nanoscience and Nanotechnology (ATNN-2013)	Nanotechnology	New Delhi, India	2013
24.	Electrical Transport in Nicatalyzed multi-wall carbon nanotubes	International Conference on Nanotechnology	Nanotechnology	Jeddah, Saudi Arabia	17-19 June, 2008
23.	Growth of Fe-Pt catalyzed MWNTs; A Potential Material for Hydrogen Storage	International Materials Research Congress	Material Science	CACUN, MEXICO	19-25 Aug, 2006
22.	Synthesis of Carbon nanotubes using Ni nano-crystalline film as a catalyst	International conference on Nanoscience and Technology	Nanoscience	New Delhi, India	16-18 March, 2006
21.	Study of multi-walled carbon nanotubes growth on	International workshop on Physics of	Semiconductor Device	New Delhi, India	13-17 Dec, 2005

	Fe-nano-crystalline film	Semiconductor Devices Vol. 1			
20.	Electrical properties of individual carbon nanotubes	Chinese Annual Meeting of Physics	Physics	Kaoshiung, Taiwan	1-3 Feb, 2005
19.	Synthesis of carbon nanotubes on Fe-Pt film	International workshop on Physics of Semiconductor Devices	Semiconductor Devices	New Delhi, India	14-19 Dec, 2004
18.	Characterization of carbon nanotubes grown on Fe-Pd films	EMSI conference on microscopy	Microscopy	New Delhi, India	2004
17.	I-V characteristics of individual multi-walled carbon nanotube	International conference on Materials Science (IUMRS)	Material Science	Taiwan	12-16 Nov, 2004
16.	Effect of ECR plasma exposure on optical constants of $\text{Se}_{80}\text{Te}_{20-x}\text{Pb}_x$ thin films	International Conference on Nanoscience and Technology	Nanotechnology	Taiwan	June 30-July 03, 2004.
15.	Novel Catalysts used for the synthesis of carbon nanotubes	Eight International Conference on New Diamond Science & Technology	Nanoscience	Melbourne, Australia	2002
14.	Electrical Properties of $a\text{-(Se}_{70}\text{Te}_{30})_{100-x}(\text{Se}_{98}\text{Bi}_2)_x$ Alloys	The Sixth Asian Thermo-physical Properties Conference (ATPC'2000)	Nanoscience	Guwahati (Assam), India	08-11 Oct, 2001
13.	Transient Photoconductivity Measurements in $a\text{-Se}_{80-x}\text{Ga}_{20}\text{Te}_x$ Thin Films	International Conference on Advance Materials	Materials Science	Meerut, U.P., India	26-28 Dec, 2000
12.	Optical Properties of Glassy $\text{Ga}_{10}\text{Te}_{90-x}\text{Sb}_x$ Alloys	National Conference on Materials and Semiconductor Technologies in Electronic Research	Semiconductor Device	Pantnagar, India	08-10 Nov, 2000
11.	Crystallization Kinetics in $a\text{-Se}_{100}$ .	International Workshop on	Semiconductor Device	New Delhi, India	14-18 Dec, 1999

	$x\text{Bi}_x$ Alloys	Physics of Semiconductors Devices			
10.	Crystallization Kinetics in a- $(\text{Se}_{70}\text{Te}_{30})_{100-x}(\text{Se}_{98}\text{Bi}_2)_x$ Alloys	National Seminar on Physics of Materials for Electronic and Opto-electronic Devices	Opto-Electronic Devices	Jodhpur, India	08-10 March, 1999
9.	Electrical and Dielectric Studies of a- $\text{Ga}_x\text{Te}_{100-x}$ Alloys	Regional Workshop on Characterization of Semiconductor Nanostructures their applications to Opto-electronic Devices	Opto-Electronic Devices	New Delhi, India	01-04 Dec, 1998
8.	Compositional dependence optical studies of a-Se-Ga-Sb thin films. (ii) Thermal Studies of a- $\text{Se}_{80-x}\text{Ga}_{20}\text{Te}_x$ Thin Film	International Workshop on Physics of Semiconductors Devices	Semiconductor Devices	New Delhi, India	16-21 Dec, 1997
7.	X-ray K-absorption edge of Glassy Semiconducting Ga-Se Alloys	4 <sup>th</sup> National Seminar on X-ray Spectroscopy and allied Areas	Spectroscopy	Ratlam (MP), India	17-19 Nov, 1997
6.	Electrical Conductivity and Thermo-electric Power in a- $\text{Se}_{80-x}\text{Ga}_{20}\text{Te}_x$ Thin Films.	International Conference on the Physics of Disordered Materials	Material Science	Jaipur (Rajasthan), India	27-29 Jan, 1997
5.	Optical Properties of a- $\text{Se}_{80-x}\text{Ga}_{20}\text{Te}_x$ Thin Films	3 <sup>rd</sup> International Conference and Intensive Tutorial Course on Semiconductor Materials & Technology	Semiconductor Material	New Delhi, India	19-21 Dec, 1996
4.	Optical Properties of a- $\text{Se}_{80-x}\text{Ga}_{20}\text{Bi}_x$ Semiconducting thin films. (ii) Electrical Transport Properties of Glassy Semiconducting a-	International Seminar on Current Developments in Disordered Materials	Material Science	Kurukshetra, India	22-24 Jan, 1996

	$\text{Se}_{80-x}\text{Ge}_{30}\text{In}_x$				
3.	Electrical Transport Properties of a- $\text{Se}_{80-x}\text{Ga}_{20}\text{Sb}_x$ Thin Films	4 <sup>th</sup> International Workshop on Physics of Semiconductor Devices	Semiconductor Devices	New Delhi, India	11-16 Dec, 1995
2.	Electrical Transport Properties of thin films of a- $\text{Se}_{80-x}\text{Ga}_{20}\text{Bi}_x$	National Seminar on Disordered Materials	Material Science	Jaipur (Rajasthan), India	24-26 Oct, 1994
1.	Chemical Shift of the X-ray K-absorption edge of glassy semiconducting GeSe.	International Symposium on Spectroscopy and Astrophysics	Spectroscopy	India	1993

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